

Educational Product

Educators & Students

Grades 5-12

ET-2004-10-132-ARC

Educational Topic

Commercial Airline Flight Planner

Related Job Titles:

Flight Plan Delivery, Flight Plan Associate, Flight Engineer

Job Description:

The Commercial Airline Flight Planner works for the various commercial airline and charter aircraft companies and work from each companies' designated work station around the United States. Using their comprehensive knowledge of weather charts and weather maps, as well as their expertise in aeronautical chart reading, they gather current and predictive data to plan the many flight routes that aircraft for their company will be flying that day. These flight plans include the route, updated weather data to be expected along the way, sectors and Centers through which the aircraft will fly, airspeed, and departure and arrival times.

Interests / Abilities:

- Do you enjoy figuring out what route to take when preparing for vacation?
- When looking at a map, can you quickly see more than one route to a destination?
- Are you patient when it comes to completing forms requiring detailed information?
- Is reading and understanding charts with special symbols is easy for you?
- Can you solve problems regardless of the pressure to meet a deadline?
- Are you able to visualize a 2-dimensional picture in a 3-dimensional way?
- Is it easy for you to use a computer to get information and to help solve problems?
- Do you have excellent written skills and the ability to provide clear, concise directions?

Education / Training Needed:

Completion of a 4-year degree program from an accredited college or university is required before airline company training. You must pass an airline company aptitude test and successfully complete airline company flight plan training.

Suggested School Subjects / Courses:

- Physics
- · Aeronautics or the science of flight
- Algebra
- · Geometry
- Meteorology
- · Geography and mapping
- English composition
- Computer database usage

Areas of expertise:

- Thorough knowledge of the air traffic management system and the FAA regulations
- · Weather phenomena and its effects on flight
- Knowledge of US weather patterns
- Knowledge of weather data found on charts, graphs, and maps
- Flight planning and aeronautical chart reading

Additional Resources:

- Careers in Aviation/Aerodynamics http://wings.avkids.com/Careers/index.html
- Earth to Orbit: Engineering Design Challenges http://eto.nasa.gov/
- Federal Aviation Administration (FAA) Air Traffic System http://www.faa.gov/ats/
- Graduate Student Researchers Program http://spacelink.nasa.gov/Instructional.Materials/NASA.Educa tional.Products/Graduate.Student.Researchers.Program.Brochur e/.index.htmlt
- MATHCOUNTS Competition http://mathcounts.org/
- Minority University Research and Education Programs http://mured.nasaprs.com/
- NASA Cooperative Education Program for college students
 http://spacelink.nasa.gov/Educational.Services/
 NASA.Education.Programs/Student.Support/NASA.Cooperative
- NASA Jobs http://nasajobs.nasa.gov/

.Education.Program/.index.html

- NASA SHARP Internship Program for highschoolers http://www.mtsibase.com/sharp/
- NASA Student Employment
 http://nasajobs.nasa.gov/stud_opps/employment/index.htm
- NASA Student Involvement Program student contests http://www.nsip.net/index.cfm

What can I do right now?

- Join a group like the Civil Air Patrol (CAP) and participate in their activities.
- Learn how to read all types of geographical maps, aeronautical charts, and weather maps and charts.
- Take a ground school course and some basic pilot training.
- Get work experience where you have to gather weather data or use aeronautical charts.
- View the NASA/FAA CD-ROM Gate to Gate to learn more about the air traffic management system. Gate to Gate is available through NASA CORE for a minimum fee. http://core.nasa.gov

 School of Aviation Science Air Traffic Control

http://www.aviation.wmich.edu/home.html

- Revolutionary Vehicle Concepts and Systems student competition http://avst.larc.nasa.gov/competitions.html
- Tech-Interns.com http://www.tech-interns.com/

- Please take a moment to evaluate this product at:
- http://ehb2.gsfc.nasa.gov/edcats/educational_topic
- Your evaluation and suggestions are vital to continually improving NASA educational materials.
- Thank you.



http://quest.nasa.gov/people/index.html